Army's First Wind Turbine Starts Work at Tooele Army Depot, Utah

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TOOELE ARMY DEPOT, Utah -- All eyes were on the sky at Tooele Army Depot July 7, as the members of the workforce waited to see the blades of their first wind turbine spinning.

Tooele Army Depot held a ribbon-cutting ceremony to celebrate the project completion of the first wind turbine not only at the depot, but also in Tooele County and at an Army installation.

"This project has been in the works for many years and we are very glad to finally see it come to fruition," said Col. Yolanda Dennis-Lowman, depot commander, to a group of guests gathered at the base of the wind turbine during her remarks prior to the ribbon cutting and the official start-up of the turbine.

Jay Weyland, TEAD's energy manager, and the driving force behind the wind turbine project, stood beside the commander beaming.

"I felt like it was Christmas morning all day," Weyland said after witnessing the turbine officially turn on."Imagine a young child that had been shaking Christmas presents for weeks before Christmas, and was finally allowed to open them. That was the type of excitement I was experiencing."

Weyland began the approval process to have a wind turbine at TEAD in 2005. The project was finally approved and funded through the Department of the Army Energy Conservation and Investment Program in 2007. In 2009 it was awarded to PNE, a family owned contractor out of Washington.

On Wednesday all the years of research, data gathering and hard work culminated when the 262-foot-tall wind turbine began spinning its three 126-foot-long blades. It will generate 1.5 megawatts of electricity which translates to approximately $206,625 in savings per year.

The turbine, which was completed a year ahead of schedule, was stood up almost overnight during the first week in June. From June 29 through July 6, it was turned on and off intermittently for training and maintenance purposes, but still generated electrical power for about 52 hours. During that time alone, the wind turbine generated approximately

$2,000 worth of electricity, Dennis-Lowman said.

"From the power output that we are seeing right now, I can see we are going to get a higher payback then we anticipated and I believe other turbines here will be justified," Weyland said.

A wind turbine like the one at TEAD requires wind speeds of at least 12 mph to generate electricity. The average wind speed at the depot's wind-turbine site is 14 mph. Weyland said the amount of electricity presently being generated should cover all electrical requirements Friday through Sunday and about one third of requirements for the remaining days of the week.

"TEAD is leading the way in renewable energy solutions and going green will enable us to remain always at the ready," said Dennis-Lowman. "This is the first turbine for the depot, but with (Weyland's) help, hopefully more will come."